

Billing Code: 4910-60-P

DEPARTMENT OF TRANSPORTATION

Research and Special Programs Administration

49 CFR Parts 192 and 195

[Docket No. RSPA-97-3001; Amdt. Nos. 192-98, 195-82]

RIN 2137-AC54

PIPELINE SAFETY: PERIODIC UNDERWATER INSPECTIONS

AGENCY: Research and Special Programs Administration
(RSPA), U.S. Department of Transportation (DOT).

ACTION: Final Rule.

SUMMARY: This rule amends the pipeline safety regulations to require operators of gas and hazardous liquid pipelines to prepare and follow procedures for periodic inspections of pipeline facilities located in the Gulf of Mexico and its inlets in waters less than 15 feet deep. These

inspections will inform the operator if the pipeline is exposed or a hazard to navigation.

DATES: This rule is effective on [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

FOR FURTHER INFORMATION CONTACT: L.E. Herrick by phone at (202) 366-5523, by fax at (202) 366-4566, or by e-mail at le.herrick@rspa.dot.gov, regarding the subject matter of this rule. General information about RSPA's Office of Pipeline Safety (OPS) programs may be obtained by accessing OPS's Internet page at <http://ops.dot.gov>.

SUPPLEMENTARY INFORMATION:

I. Background

RSPA/OPS Pipeline Safety Mission

RSPA/OPS has responsibility for ensuring safety and environmental protection against risks posed by the Nation's approximately two million miles of gas and hazardous liquid pipelines. RSPA/OPS shares responsibility

for inspecting and overseeing the Nation's pipelines with state pipeline safety offices.

The Need for Periodic Underwater Inspections

On July 24, 1987, the fishing vessel Sea Chief struck and ruptured an 8-inch submerged natural gas liquids pipeline in the Gulf of Mexico. The escaping gas ignited and exploded, killing two crew members. A similar accident occurred on October 3, 1989, when the fishing vessel Northumberland struck and ruptured a 16-inch submerged gas pipeline, killing 11 crew members.

The National Transportation Safety Board (NTSB) investigated the Northumberland accident and prepared a report, Fire on Board the F/V Northumberland and Rupture of a Natural Gas Transmission Pipeline in the Gulf of Mexico Near Sabine Pass, TX (October 3, 1989; NTIS Report Number PB90-916502), which found that the probable cause of the accident was the failure of the pipeline operator to maintain the pipeline at the burial depth to which it was initially installed.

NTSB also found that the failure of RSPA/OPS to require pipeline operators to inspect and maintain submerged pipelines in a protected condition contributed to

the accident. The NTSB subsequently issued Safety Recommendation P-90-29, which directed RSPA/OPS to "develop and implement with the assistance of the Mineral Management Service (MMS), the United States Coast Guard (USCG), and the United States Army Corp of Engineers (USACE), effective methods and requirements to bury, protect, inspect the burial depth of and maintain all submerged pipelines in areas subject to damage by surface vessels and their operations."

Legislative Amendments and Subsequent Actions

In November 1990, Congress addressed hazards of underwater pipelines through amendments to the Hazardous Liquid Pipeline Safety Act of 1979 and the Natural Gas Pipeline Safety Act of 1968 (P.L. 101-599). These amendments, in part, required the operators of offshore pipeline facilities in the Gulf of Mexico and its inlets to conduct an underwater depth-of-burial inspection of the pipeline facility and to report any exposed portion or any portion of the pipeline facility which posed a hazard to navigation to the Secretary of Transportation.

The 1990 amendments also required the Secretary of Transportation to establish a mandatory, systematic, and,

where appropriate, periodic inspection program of all offshore pipeline facilities and any other pipeline facility crossing under, over, or through navigable waters (as defined by the Secretary) if the Secretary decides that the location of the facility in those navigable waters could pose a hazard to navigation or public safety.

In response to the NTSB recommendation and the Congressional mandates, RSPA/OPS formed a multi-agency task force on offshore pipelines to study the issue. The task force consisted of representatives from RSPA/OPS, USCG, MMS, the Department of Commerce, the National Oceanic and Atmospheric Administration/National Oceans Service, the USACE, the Louisiana Office of Conservation, and the Texas Railroad Commission.

The task force reviewed information, views, and concerns provided by the government and the marine and pipeline industries. The assessment focused on the extent and adequacy of Federal regulations, the technology for determining pipeline location and cover, the availability of maps and charts depicting the location of pipelines, and possible government initiatives to enhance safety.

In November 1990, the task force issued a report, Joint Task Force Report on Offshore Pipelines. The report concluded that exposed pipelines pose a potential risk to

navigation safety, especially for mariners operating in shallow, near-shore waters. The task force also concluded that underwater inspections for depth-of-burial of those pipelines were not being performed despite a requirement to place pipelines below the sea floor in shallow water.

To reduce the likelihood of further casualties, the report recommended that operators inspect these pipelines at regular intervals and re-bury exposed pipelines. A copy of the report is available in the docket for this rulemaking.

On December 5, 1991, RSPA/OPS published regulations requiring an operator to conduct inspections of its underwater pipelines in the Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep as measured from mean low water (56 FR 63764). The regulations required that these inspections be completed before November 16, 1992, and that the results be submitted to RSPA/OPS.

The results of these inspections were reported to RSPA/OPS and have been used to inform this rulemaking. The regulations also established a course of action for the operator to follow if, as a result of the inspection or upon notification by any person, the operator discovers that a pipeline is exposed or a hazard to navigation.

National Research Council Report

In 1994, to gain further information on the risks posed by underwater pipelines, RSPA/OPS, in conjunction with other Federal agencies, requested that the Marine Board of the National Research Council (NRC) conduct an interdisciplinary review and assessment of the many technical, regulatory, and jurisdictional issues that affect the safety of the marine pipelines in the United States' offshore waters. The Marine Board's interdisciplinary Committee on the Safety of Marine Pipelines reviewed the causes of past pipeline failures, the potential for future failures, and the means of preventing or mitigating these failures. The NRC issued a report, Improving the Safety of Marine Pipelines (1994). This report is available online at: <http://books.nap.edu/books/0309050472/html/>. The report can also be ordered by mail at National Academies Press, 500 Fifth Street, NW, Lockbox 285, Washington, DC 20055. A copy of this report is also available for review in the docket for this rulemaking.

The NRC determined that the marine pipeline network does not present an extraordinary threat to human life.

Pipeline accidents involving deaths or injuries are rare. The most widespread risks posed by pipelines are due to oil pollution--mainly from pipelines damaged by vessels and their gear. The NRC concluded that the risks generally could be managed with currently available technology and without major new regulations if enforcement of some current regulations is improved.

In June 1997, a comprehensive study of the pipeline surveys in the Gulf of Mexico required by §§ 192.612 and 195.413 was completed by the Texas Transportation Institute (TTI). TTI also collected information on the available technology to conduct underwater depth-of-burial inspections and made recommendations for risk analysis, inspection intervals, and establishment of a definition of underwater natural bottom. A copy of the report, Analysis of Pipeline Burial Surveys in the Gulf of Mexico, is available in the docket for this rulemaking.

In addition to this final rule, many of the issues identified in these reports, in particular risks of pipelines in navigable waters, have been addressed in four other final rules: December 2000--a rule that requires integrity management programs for large liquid pipelines (65 FR 75377); January 2002--a rule that requires integrity management programs for smaller liquid pipelines

(67 FR 2136); August 2002--a rule that defines "High Consequence Areas" (HCA) for gas transmission pipelines (67 FR 50824); and January 2003--a rule that revises the HCA definition and requires integrity management programs for gas transmission pipelines in HCAs (69 FR 69778).

Notice of Proposed Rulemaking

On December 12, 2003, RSPA/OPS issued a Notice of Proposed rulemaking (NPRM) with request for comment (68 FR 69368). The comment period closed on March 10, 2004. Copies of the NPRM, the Draft Final Regulatory Evaluation, the Regulatory Flexibility Certification, and the comments are available in the docket for this rulemaking.

RSPA/OPS proposed to require operators of hazardous liquid and natural gas pipelines to prepare and follow a procedure to conduct periodic underwater inspections of their pipelines offshore or crossing under commercially navigable waterways in waters less than 15 feet deep to ensure that the pipeline is not exposed or a hazard to navigation.

The procedure would be used by the operator to assess the risk of an underwater pipeline becoming exposed or a hazard to navigation by taking into account the particular

dynamics of the water and bottom, including the probability of flotation, scour, erosion, and the impacts of major storms. The operator would also establish a timetable for depth-of-burial inspection of shallow underwater pipelines based on the identified risks. The NPRM provided, as an example, the risk analysis procedure developed by TTI in their report.

II. Comment discussion

RSPA/OPS received 22 comments to the NPRM: one from a private individual, one from a marine pipeline consultant, one from a fisheries company, one from a State utilities board, four from trade organizations, and fourteen from pipeline companies.

A. General Comments

1. Several commenters supported the proposed rule. One commenter stated that every 38 minutes a football sized parcel of Louisiana's wetlands turns to water and that regulations that clearly require procedures for periodic inspections of underwater pipelines is an important part of preventing pipeline damage. Another commenter noted that

the chaos caused when pipelines are struck and destroyed not only hurts humans, but also causes catastrophe in the ocean by injuring fish, marine mammals, and the quality of the water.

Another commenter stated that the NPRM was timely. The commenter identified nine incidents involving collisions of vessels and underwater pipelines and stated that the Coast Guard "Notice to Mariners" frequently identify locations of exposed pipelines that have been discovered and marked with warning buoys.

However, many commenters raised questions and concerns about the proposed rule, in particular the inclusion of waters other than the Gulf of Mexico and its inlets. Several commenters did not believe the NPRM adequately justified expanding the pipeline survey requirements from the Gulf of Mexico to all inland waterways, noting that the NPRM did not provide evidence of accidents or incidents in shallow inland commercially navigable waters. Another commenter recommended that pipeline operating environments such as Long Beach harbor be excluded from this rule.

Several commenters suggested that this issue merited more public discussion to provide an opportunity to develop a technical basis for including crossings of navigable waters in the rulemaking. Another commenter stated that

the analysis omitted the impact on up to 1,400 gas distribution operators.

Response

RSPA/OPS believes that this rule is necessary. It is expected to result in increased protection from the Northumberland type incidents. However, RSPA/OPS has determined that the underwater periodic inspection provision will be limited to the Gulf of Mexico and its inlets. RSPA/OPS has not been presented with sufficient evidence that the rule should include other offshore and inland waters. RSPA/OPS believes that hazards to navigation in these areas is already being adequately managed by application of the regulations in Part 192 and Part 195 and the regulations of other agencies.

Therefore, RSPA/OPS concludes that offshore waters outside the Gulf of Mexico and its inlets and inland waters have not been shown to pose a hazard to navigation or public safety that warrant periodic underwater inspections.

2. Another operator stated that 90% of all damage is caused by anchors and occurs most often in shallow bays and inlets. The commenter suggests that more education is

needed on the part of the marine vessel industry on how to avoid areas that pose a higher than normal risk. Another commenter stated that prevention of damage to pipeline facilities must be a cooperative effort between pipeline and vessel operators.

Response

RSPA/OPS agrees and has supported efforts to develop international signage designed to warn vessel operators of pipeline hazards. In addition, RSPA/OPS works closely with other Federal and state agencies, such as USCG, MMS, USACE, and the Environmental Protection Agency (EPA) to address public safety concerns. However, RSPA/OPS' authority to implement rulemaking does not extend to the marine vessel industry.

3. Another commenter believed that there is not sufficient data to prove that natural gas pipelines account for a significant amount of pollution. The commenter stated that some distinction needs to be made between damage to hazardous liquid pipelines and damage to gas pipelines.

Response

RSPA/OPS disagrees. The 13 fatalities noted in the NPRM were the result of vessel interaction with natural gas pipelines. The study by the NRC recommended that natural gas and hazardous liquid pipelines be regulated identically under the periodic depth-of-burial inspection regulation because the higher risk to persons or property posed by natural gas pipeline facilities is balanced by the higher risk to the environment posed by hazardous liquid pipelines.

4. Another commenter believed that a mandatory "one-call" system, as is presently required for onshore pipelines, needs to be developed for marine pipelines.

Response

RSPA/OPS supports the concept of "one-call" and has forwarded this recommendation to the [Common Ground Alliance](#) (CGA), a nonprofit organization dedicated to damage prevention efforts. The CGA addresses the many issues involved in protecting the nation's underground infrastructure from outside force damage.

6. A commenter stated that the cost-benefit analysis provided with the NPRM does not account for the cost of remediation, which could be significant.

Response

RSPA/OPS disagrees. The cost of remediation should not be included in the cost-benefit analysis for this rule because an operator is required to re-bury the pipeline under current regulations when it becomes aware that the pipeline is exposed or a hazard to navigation.

B. Performance-based v. Prescriptive Regulations

RSPA/OPS requested comments on the respective merits of a performance-based or a prescriptive requirement. A performance-based requirement would require an operator to use risk-based analyses to determine the periodic underwater inspection intervals for each of their pipelines and to conduct the appropriate periodic underwater inspections. A prescriptive requirement would mandate a specific periodic underwater inspection interval.

Nine commenters supported a performance-based approach. Another commenter stated that the acceptance of integrity management principles by RSPA/OPS is a practical method of ensuring pipeline safety and that performance-based regulations should be used whenever possible. Another commenter stated that the different soil and weather conditions require individual evaluations and determinations of adequate inspection intervals. Another commenter urged that predictive land loss models be used because some coastal areas require more frequent inspection than others and that performance-based language would allow operators the flexibility to address the myriad of situations encountered with underwater buried pipelines in a practical and effective manner.

Three commenters supported some combination of approaches. A commenter suggested a trigger mechanism to require an inspection following a major storm and marine event. The commenters believed that regulatory language that is entirely performance-based, without benchmarks for compliance, could lead to inconsistency in implementation and enforcement.

Two commenters supported a prescriptive approach for the inspection of liquid pipelines. Two commenters sought clarification that the recommendations in the Joint Task

Force report, the NRC report, and the TTI report were discretionary guidelines for establishing risks and underwater periodic inspection intervals.

One commenter recommended that inspection intervals longer than five years should be established on a case-by-case basis and be based on knowledge and experience gained during the ongoing inspections. Another commenter supported a mandated interval of five years with provision to extend this interval for sound technical reasons. Another commenter supported deferring to MMS directives as the trigger mechanism for more frequent inspections in the Gulf of Mexico and its inlets. Another commenter stated that the value of a prescriptive approach is that it would establish unambiguous requirements for inspection intervals and protocols.

Response

RSPA/OPS agrees with most of the commenters regarding use of a performance-based approach. RSPA/OPS is implementing a performance-based approach because it offers the best overall protection without imposing overly burdensome requirements that may not reflect the operating environment of the pipeline. RSPA/OPS confirms that

adoption of the risk analysis systems provided in the NPRM and further articulated in the TTI report is discretionary. RSPA/OPS provided the examples in order to demonstrate the levels of complexity for the proposed performance-based requirement.

C. Hazard to Navigation

Several commenters noted that the use of the term "sea bed" in the definition of "hazard to navigation" is inappropriate. They suggested that RSPA/OPS use the term that was defined in the proposed rule, "underwater natural bottom," in place of the term "sea bed."

Another commenter opposed defining a "navigational hazard" as a pipeline that is buried less than 24 inches below the seabed in water less than 15 feet deep. The commenter stated that it was not apparent from the NPRM that there exists credible scientific or empirical evidence to support 24 inches.

Response

RSPA/OPS agrees and has incorporated the phrase "underwater natural bottom" (as determined by recognized

and generally accepted practices) in place of the term "seabed" in the affected sections. RSPA/OPS also agrees that the threshold for reburial should remain at 12 inches and is retaining the threshold of 12 inches in the definition of "hazard to navigation." RSPA/OPS believes that 12 inches is an appropriate threshold because there has not been a Sea Chief or Northumberland type accident since the inspection and reburial regulation issued by RSPA/OPS in 1991.

D. Commercially Navigable Waterways

Several commenters questioned the definition of commercially navigable waterways. Some commenters believed that using the Bureau of Transportation Statistics (BTS) database of commercially navigable waterways and non-commercially navigable waters helps provide consistency and certainty to the regulation, but others believed that the BTS database should not be the definitive source for defining commercially navigable waters.

Response

RSPA/OPS agrees that the description of commercially

navigable water in the NPRM is confusing. In addition, RSPA/OPS did not receive comments that pipelines crossing these waters currently pose a threat to navigation that is not already being addressed by the recent integrity management rules for high consequence areas and other regulations.

RSPA/OPS is limiting the requirement to waters less than 15 feet deep in the Gulf of Mexico and its inlets. Therefore it is not necessary to define commercially navigable waterways in this rule.

E. Reporting Requirements

Several commenters requested confirmation that the existing regulations requiring operators to notify the National Response Center upon becoming aware that their pipeline is exposed or a hazard to navigation remain in effect.

Response

RSPA/OPS confirms that the existing regulations at §§ 192.612(b)(1) and 195.413(b)(1) remain in effect. These regulations require an operator to promptly, but not later

than 24 hours after the discovery, notify the National Response Center upon becoming aware that their pipeline is exposed or a hazard to navigation.

F. Marking Exposed Pipelines Pending their Reburial

One commenter encouraged a specific reference to a USCG-approved marker for identifying pipeline hazards to navigation, particularly as it relates to night time navigation. Another commenter supported the current regulations that require marking of exposed pipelines pending their reburial.

Response

RSPA/OPS believes that the current regulations sufficiently address the marking of exposed underwater pipelines. They require an operator to promptly, but not later than 7 days after the discovery, mark the location of the pipeline in accordance with 33 CFR Part 64 (the USCG regulations for identifying hazards to navigation).

G. Reburial Requirements

Many commenters believed that the final regulation should allow for operators to use sound and proven engineering alternatives, such as articulated concrete mats, riprap stone, and pre-manufactured concrete blocks, that provide a level of protection that meets or exceeds the protection derived from reburial. One commenter suggested that the proposed rule should clarify that the reburial only applies if the pipeline is a hazard to navigation, as defined in §§ 192.3 and 195.2. Several commenters requested that § 195.413(b)(3) be amended to allow operators the opportunity to petition for an extension of the 6 month requirement for re-establishing protective cover of the exposed pipeline. Another commenter stated that the application of the existing reburial requirements to offshore pipelines is inconsistent. The initial construction requirements differentiate burial for offshore pipelines in less than 12 feet of water and those in at least 12 feet of water. For initial construction, pipelines in at least 12 feet of water are to be placed below the natural bottom. However, under § 192.612(b)(3), pipelines between 12 and 15 feet of water will require reburial to a greater depth, 36 inches for soil (18 inches for rock). These pipelines that were in compliance at initial construction located below the natural bottom will

now have to be re-buried to 36 inches.

Response

RSPA/OPS agrees with the commenters that concrete mats or other engineered alternatives to reburial can provide for a measure of safety equal to or greater than reburial, particularly in areas of high erosion or soft silty bottoms. RSPA/OPS has modified this final rule to allow for a performance-based alternative to reburial.

H. Abandoned Pipelines

Three commenters expressed support for RSPA/OPS' clarification that these proposed requirements would not apply to abandoned pipelines. They agreed that abandoned pipelines do not pose a hazard to navigation, and therefore should not be included in this rule.

Response

RSPA/OPS concurs with these commenters and has not included abandoned pipelines in this rule.

I. Exposed Pipeline

Several commenters supported RSPA/OPS' efforts to clarify that there are two types of exposed pipelines--those underwater and those that are on land. The commenters suggested that the definition of "exposed underwater pipeline" be clarified to "an underwater pipeline where the top of the pipe protrudes above the underwater natural bottom."

Response

RSPA/OPS agrees and has amended the language in the final rule.

J. Gulf of Mexico and its inlets

Several operators supported RSPA/OPS' proposed amendment to the definition of "Gulf of Mexico" to clarify that the Gulf of Mexico includes waters beyond 15 feet deep. Another commenter sought clarification on the application of the revised rule. The commenter believed that the proposed language of § 192.612(a) implied that the entire length of an offshore pipeline is subject to the

inspection and reburial requirements, regardless of water depth. In contrast, another operator encouraged RSPA/OPS to retain the current definition of Gulf of Mexico and its inlets because revising the definition would cause confusion with current permits and agreements.

Response

RSPA/OPS appreciates the support for modifying the definition of the Gulf of Mexico and its inlets to reflect that Gulf of Mexico includes waters beyond 15 feet deep. RSPA/OPS confirms that the proposed change was not intended to have a material affect on the scope of pipelines in the Gulf of Mexico affected by this rule. However, to avoid unintentional impacts on any existing contracts, RSPA/OPS is not changing the definition of Gulf of Mexico in this final rule. RSPA/OPS has clarified that certain requirements only apply to waters less than 15 feet deep by amending the affected §§ 192.612(a), 195.246(b), 195.413, 195.248(a), and 195.248(b).

K. Underwater Natural Bottom

One commenter believed that the use of the term

"surface" in the new definition of "underwater natural bottom" was confusing. The commenter stated that surface is usually interpreted to be the top, especially when dealing with water bodies. Another commenter recommended that RSPA/OPS revise the term "natural bottom" as used in § 192.327(e) to read "underwater natural bottom." Several commenters questioned RSPA/OPS' proposal to use a 50 kHz fathometer signal to determine the underwater bottom, stating that a 50 kHz fathometer may not work properly in 15 feet or less of water. The commenters were generally supportive of the use of a frequency or some sound engineering method to determine the underwater natural bottom, but believed that the choice should be performance-based.

Response

RSPA/OPS agrees. This final rule amends §§ 192.327(e), 192.612(b)(3), 195.246(b), 195.248(a), and 195.413(b)(3) to clarify that the natural bottom or seabed is the underwater natural bottom (as determined by recognized and generally accepted practices).

In addition, during the initial Gulf of Mexico underwater inspections, many operators reported confusion

in establishing the point of the underwater natural bottom. In order to resolve this concern, TTI conducted an analysis of pipeline burial in the Gulf of Mexico. The study recommended that the underwater natural bottom be defined as the surface which reflects a fathometer signal. The study further recommended the use of a 50 kHz signal as most appropriate for the very soft, silty bottoms in the Gulf of Mexico and for the water depths of 15 feet or less.

However, RSPA/OPS agrees that allowing for the use of recognized and generally accepted practices would provide the operators with greater flexibility without compromising safety and has amended this final rule accordingly.

III. Advisory Committees

The Technical Hazardous Liquid Pipeline Safety Standards Committee is a Federal advisory committee established under Section 204 of the Hazardous Liquid Pipeline Safety Act of 1974 (HLPESA) (49 App. U.S.C. 2003). The Technical Pipeline Safety Standards Committee is a Federal advisory committee established under Section 4 of the Natural Gas Pipeline Safety Act of 1968 (NGPSA). These committees advise DOT on the feasibility, reasonableness,

and practicability of standards imposed under HLPSEA and NGPSA.

The committees members convened on June 30, 2004, for a telephonic public meeting to discuss the NPRM, the public comments, and RSPA/OPS' evaluation of the comments, and to vote on the proposal. The advisory committees voted unanimously in favor of the motion that the NPRM, "Pipeline Safety Underwater Periodic Inspections" (68 FR 69368), which published on December 12, 2003, and the draft final regulatory evaluations are technically feasible, reasonable, and cost-effective if the following changes are made: (1) provisions for alternative protective measures, other than burial, including engineered protection; (2) a process to ensure that RSPA/OPS is notified of delays in the issuance of environmental permits, and (3) inspection procedures to address environmental risks.

The committees also recommended that RSPA/OPS conduct further studies to collect additional data on the risks of exposed pipelines and possible hazards to navigation in offshore waters other than the Gulf of Mexico and its inlets.

The transcript of these advisory committee meetings is available in the docket for this rulemaking.

Response

RSPA/OPS incorporated the advisory committee recommendations in the final rule to allow operators to employ engineered alternatives to burial that meet or exceed the level of protection provided by burial. In addition, RSPA/OPS has incorporated a provision in the final rule to require an operator to notify RSPA/OPS if it cannot obtain required state or Federal permits in time to comply with the regulation.

RSPA/OPS has provided examples of several environmental risk assessment procedures which were developed in conjunction with this rule. These procedures are described in detail in the National Research Council Report Improving the Safety of Marine Pipelines (1994) and in the Texas Transportation Institute Report Analysis of Pipeline Burial Surveys in the Gulf of Mexico. These reports are available in the docket for this rulemaking.

RSPA/OPS will consider issuing a notice to request further public comment on the risks of exposed pipelines

and possible hazards to navigation in offshore waters other than the Gulf of Mexico and its inlets.

V. Regulatory Analyses and Notices

A. Paperwork Reduction Act

A copy of the Paperwork Reduction Analysis for this proposal has been put in the public docket for this rule. The following is a summary of the highlights of this analysis.

Approximately 125 pipeline operators are potentially subject to this new requirement. It will take a pipeline operator approximately 500 hours to develop and implement a program to determine the need for periodic inspection. The total industry time to develop this program is 62,500 hours.

Comments were invited on: (a) the need for the proposed collection of information for the proper performance of the functions of the agency, including whether the information will have practical utility; (b) the accuracy of the agency's estimate of the burden of the collection of information including the validity of the methodology and assumptions used; (c) ways to enhance the quality, utility

and clarity of the information to be collected; and (d) ways to minimize the burden of the collection of information on those who are to respond, including the use of appropriate automated, electronic, mechanical, or other technological collection techniques.

Several commenters expressed concern about the added costs to prepare and follow a procedure to identify pipelines that are at risk of being exposed underwater pipelines or hazards to navigation and to conduct appropriate periodic underwater inspections in areas other than the Gulf of Mexico and its inlets. Because the scope of the final rule is limited to the Gulf of Mexico and its inlets, the costs of applying this rule to other offshore water and inland waters do not need to be addressed.

Some commenters questioned whether RSPA/OPS was proposing some change to the current requirements for reporting to the USCG's National Response Center. Under current regulations, if an operator discovers that a pipeline is exposed it must take actions that include reporting the location to the National Response Center. In this final rule, RSPA/OPS is not changing this requirement.

B. Executive Order 12866 and DOT Policies and Procedures

A final regulatory evaluation for this rule has been prepared and placed in the public docket. This rule is a response to Congressional requirements that pipelines posing a hazard to navigation or public safety be periodically inspected to notify the operator of the exposure or hazard. The Congressional requirements responded to two accidents in the late 1980s in which fishing vessels collided with underwater natural gas pipelines in the Gulf of Mexico, resulting in multiple fatalities.

Approximately 125 companies operate underwater pipelines in the shallow waters of the Gulf of Mexico and its inlets. Under this rule, each of these companies will be required to prepare and follow a procedure to identify pipelines in waters less than 15 feet deep that are at risk of being an exposed underwater pipeline or a hazard to navigation and to conduct appropriate periodic underwater inspections.

A survey conducted by RSPA/OPS in 1992 determined that less than two percent of the affected underwater pipeline were exposed or a hazard to navigation. RSPA/OPS believes that at most 10% of the affected pipelines may need to be reinspected periodically. RSPA/OPS estimates that the

initial cost of this proposal is \$6.25 million with annual reinspection costs of approximately \$200,000 per year. More details of the costs and benefits of this rule can be found in the public docket.

Several commenters questioned the need for extending inspection requirements outside of the Gulf of Mexico and its inlets. RSPA/OPS agrees with these comments and has limited the scope of the final rule to the Gulf of Mexico and its inlets.

Most commenters agreed with RSPA/OPS' proposal that the rule should be performance-based rather than prescriptive. RSPA/OPS is allowing operators some flexibility in complying with this rule by adopting a performance-based approach. The varied risks faced by underwater pipelines require each operator to determine the hazards posed by each of its pipelines and to develop appropriate responses to the risks. This flexibility is expected to lead to lower costs of compliance.

One commenter was concerned with the impacts on gas distribution operators who operate in inland navigable waterways. The final is limited to the Gulf of Mexico and its inlets and is not expected to have any measurable impact on gas distribution pipeline operators.

Some commenters stated that RSPA/OPS underestimated the costs of this rule by not including remediation costs. However, an operator is currently required to take action if they discover that a pipeline is exposed. Therefore, remediation is not a additional cost imposed by this rule.

C. Regulatory Flexibility Act

Several commenters were concerned that the inclusion of pipelines in navigable waterways in the proposed rule would add significant costs without added benefits. As discussed above, distribution pipeline operators had particular concerns. The great majority of small pipeline operators in the United States are distribution operators. By limiting this final rule to pipelines in the Gulf and its inlets RSPA/OPS has eliminated most, if not all, small operators from the impact of this regulation. Based on the facts available about the anticipated impact of this rulemaking, I certify, pursuant to Section 605 of the Regulatory Flexibility Act (5 U.S.C. 605), that this action will not have a significant economic impact on a substantial number of small entities.

D. Environmental Assessment

A preliminary draft Environmental Assessment (EA) was prepared and is available in the docket. No comments on the EA were received from the public. The inspection and reburial of the pipelines should not have a significant impact on the environment. Previous inspections of underwater pipelines in the Gulf of Mexico found less than two percent of pipelines required reburial. RSPA/OPS anticipates that very few pipelines will require reburial as a result of this rule. Therefore, this rule will not have a significant impact on the human environment. A Final EA has been placed in the docket.

E. Executive Order 12612 - Federalism

RSPA/OPS analyzed this action in accordance with the principles and criteria contained in Executive Order 12612 (52 FR 41685).

RSPA/OPS has determined that the action does not have substantial direct effects on the States, on the relationship between the Federal Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, this rule

does not have sufficient federalism implications to warrant preparation of a Federalism Assessment.

List of Subjects in 49 CFR Part 192.

Agency procedures, Gas, Natural gas, Pipeline safety, Reports, Transportation

List of Subjects in 49 CFR Part 195.

Agency procedures, Hazardous liquid, Oil, Petroleum, Pipeline Safety Reports, Transportation

In consideration of the foregoing, RSPA/OPS amends Parts 192 and 195 of Title 49 of the Code of Federal Regulations as follows:

Part 192 - TRANSPORTATION OF NATURAL AND OTHER GAS BY PIPELINE: MINIMUM FEDERAL SAFETY STANDARDS

1. The authority citation for Part 192 continues to read as follows:

Authority: 5121, 60102, 60103, 60104, 60108, 60117, 60118, 60124; and 49 CFR 1.53

2. Amend § 192.3 by removing the definition of Exposed pipeline and replacing it with a definition for Exposed underwater pipeline and revising the definition of Hazard to navigation to read as follows:

§ 192.3 Definitions.

* * * * *

Exposed underwater pipeline means an underwater pipeline where the top of the pipe protrudes above the underwater natural bottom (as determined by recognized and generally accepted practices) in waters less than 15 feet (4.6 meters) deep, as measured from mean low water.

* * *

Hazard to navigation means, for the purposes of this part, a pipeline where the top of the pipe is less than 12 inches (305 millimeters) below the underwater natural bottom (as determined by recognized and generally accepted practices) in waters less than 15 feet (4.6 meters) deep, as measured from the mean low water.

* * * * *

3. Amend § 192.327 by revising paragraph (e) to read as follows:

§ 192.327 Cover.

* * * *

(e) Except as provided in paragraph (c) of this section, all pipe installed in a navigable river, stream, or harbor must be installed with a minimum cover of 48 inches (1,219 millimeters) in soil or 24 inches (610 millimeters) in consolidated rock between the top of the pipe and the underwater natural bottom (as determined by recognized and generally accepted practices).

* * * *

4. Section 192.612 is revised to read as follows:

§ 192.612 Underwater inspection and reburial of pipelines in the Gulf of Mexico and its inlets.

(a) Each operator shall prepare and follow a procedure to identify its pipelines in the Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep as measured from mean low water that are at risk of being an exposed underwater pipeline or a hazard to navigation. The procedures must be in effect [INSERT DATE ONE YEAR FROM DATE OF PUBLICATION IN FEDERAL REGISTER].

(b) Each operator shall conduct appropriate periodic underwater inspections of its pipelines in the Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep as measured from mean low water based on the identified risk.

(c) If an operator discovers that its pipeline is an exposed underwater pipeline or poses a hazard to navigation, the operator shall –

(1) Promptly, but not later than 24 hours after discovery, notify the National Response Center, telephone: 1-800-424-8802, of the location and, if available, the geographic coordinates of that pipeline.

(2) Promptly, but not later than 7 days after discovery, mark the location of the pipeline in accordance with 33 CFR Part 64 at the ends of the pipeline segment and at intervals of not over 500 yards (457 meters) long, except that a pipeline segment less than 200 yards (183 meters) long need only be marked at the center; and

(3) Within 6 months after discovery, or not later than November 1 of the following year if the 6 month period is later than November 1 of the year of discovery, bury the pipeline so that the top of the pipe is 36 inches (914 millimeters) below the underwater natural bottom (as determined by recognized and generally accepted practices)

for normal excavation or 18 inches (457 millimeters) for rock excavation.

(i) An operator may employ engineered alternatives to burial that meet or exceed the level of protection provided by burial.

(ii) If an operator cannot obtain required state or Federal permits in time to comply with this section, it must notify OPS; specify whether the required permit is state or Federal; and, justify the delay.

Part 195 - TRANSPORTATION OF HAZARDOUS LIQUIDS BY PIPELINE

1. The authority citation for part 195 continues to read as follows:

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109, 60118; and 49 CFR 1.53.

2. Amend § 195.2 by removing the definition of Exposed pipeline and replacing it with a definition for Exposed underwater pipeline and revising the definition of Hazard to navigation to read as follows:

§ 195.2 Definitions.

* * * * *

Exposed underwater pipeline means an underwater pipeline where the top of the pipe protrudes above the underwater natural bottom (as determined by recognized and generally accepted practices) in waters less than 15 feet (4.6 meters) deep, as measured from mean low water.

* * *

Hazard to navigation means, for the purposes of this part, a pipeline where the top of the pipe is less than 12 inches (305 millimeters) below the underwater natural bottom (as determined by recognized and generally accepted practices) in waters less than 15 feet (4.6 meters) deep, as measured from the mean low water.

* * * * *

3. Amend § 195.246 by revising paragraph (b) to read as follows:

§ 195.246 Installation of pipe in a ditch.

* * * * *

(b) Except for pipe in the Gulf of Mexico and its inlets in waters less than 15 feet deep, all offshore pipe in water at least 12 feet deep (3.7 meters) but not more than 200 feet deep (61 meter) deep as measured from the mean low water must be installed so that the top of the pipe is

below the underwater natural bottom (as determined by recognized and generally accepted practices) unless the pipe is supported by stanchions held in place by anchors or heavy concrete coating or protected by an equivalent means.

* * * * *

4. Amend § 195.248 by revising paragraph (a) and (b) to read as follows:

§ 195.248 Cover over buried pipeline.

(a) Unless specifically exempted in this subpart, all pipe must be buried so that it is below the level of cultivation. Except as provided in paragraph (b) of this section, the pipe must be installed so that the cover between the top of the pipe and the ground level, road bed, river bottom, or underwater natural bottom (as determined by recognized and generally accepted practices), as applicable, complies with the following table:

Location	Cover inches (millimeters)	
	For normal excavation	For rock excavation ¹
Industrial, commercial, and residential areas.....	36 (914)	30 (762)
Crossing of inland bodies of water with a width of at least 100 feet (30 millimeters) from high water mark to high water mark.....	48 (1219)	18 (457)

Drainage ditches at public roads and railroads	36(914)	36 (914)
Deepwater port safety zones	48 (1219)	24 (610)
Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep as measured from mean low water	36 (914)	18 (457)
Other offshore areas under water less than 12 ft (3.7 meters) deep as measured from mean low water	36 (914)	18 (457)
Any other area	30 (762)	18 (457)

¹ Rock excavation is any excavation that requires blasting or removal by equivalent means.

(b) Except for the Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep, less cover than the minimum required by paragraph (a) of this section and § 195.210 may be used if—

* * * * *

5. Section 195.413 is revised to read as follows:

§ 195.413 Underwater inspection and reburial of pipelines in the Gulf of Mexico and its inlets.

(a) Except for gathering lines of 4½ inches (114mm) nominal outside diameter or smaller, each operator shall prepare and follow a procedure to identify its pipelines in the Gulf of Mexico and its inlets in waters less than 15 feet

(4.6 meters) deep as measured from mean low water that are at risk of being an exposed underwater pipeline or a hazard to navigation. The procedures must be in effect [INSERT DATE ONE YEAR FROM DATE OF PUBLICATION IN FEDERAL REGISTER].

(b) Each operator shall conduct appropriate periodic underwater inspections of its pipelines in the Gulf of Mexico and its inlets in waters less than 15 feet (4.6 meters) deep as measured from mean low water based on the identified risk.

(c) If an operator discovers that its pipeline is an exposed underwater pipeline or poses a hazard to navigation, the operator shall –

(1) Promptly, but not later than 24 hours after discovery, notify the National Response Center, telephone: 1-800-424-8802, of the location and, if available, the geographic coordinates of that pipeline.

(2) Promptly, but not later than 7 days after discovery, mark the location of the pipeline in accordance with 33 CFR Part 64 at the ends of the pipeline segment and at intervals of not over 500 yards (457 meters) long, except that a pipeline segment less than 200 yards (183 meters) long need only be marked at the center; and

(3) Within 6 months after discovery, or not later than November 1 of the following year if the 6 month period is later than November 1 of the year of discovery, bury the pipeline so that the top of the pipe is 36 inches (914 millimeters) below the underwater natural bottom (as determined by recognized and generally accepted practices) for normal excavation or 18 inches (457 millimeters) for rock excavation.

(i) An operator may employ engineered alternatives to burial that meet or exceed the level of protection provided by burial.

(ii) If an operator cannot obtain required state or Federal permits in time to comply with this section, it must notify

OPS; specify whether the required permit is state or Federal; and, justify the delay.

Issued in Washington, DC on _____.

Samuel G. Bonasso,
Deputy Administrator.